

# New Cadet Barracks Named for Benjamin Davis

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By JoAnne Castagna, Ed.D.

**WEST POINT** – Douglas Melville of New York City was very close with his late Uncle, U.S. Air Force general officer Benjamin Oliver Davis Jr.

He smiles as he remembers the lessons he learned from the U.S. Military Academy West Point's first African-American graduate of the 20th Century. Davis was a military pioneer during his time – a time of racial segregation that inspired Melville to take on a career as a Chief Diversity Officer.

"My uncle said the wheels of justice turn slowly. Things are going to take time, take generations and take lives to get changed and implemented but you need to stay determined and dedicated towards those goals."

*From top left, clockwise: Douglas Melville speaking at the Davis Barrack's Dedication Ceremony. (Credit: USACE, New York District, Public Affairs); U.S. Air Force general officer Benjamin Oliver Davis Jr. (Credit: USACE); Front exterior of Davis Barracks under construction, U.S. Military Academy West Point. (Credit: Daniel Desmet, Public Affairs, New York District); and U.S. Air Force general officer Benjamin Oliver Davis Jr. (Credit: USACE)*

Melville is witnessing this change in action this century as the U.S. Military Academy names a new Cadet barracks after Benjamin Davis.

Davis was selected because of what he stood for. Melville said, "My uncle made sure to instill in me that as I go through my professional career that it was important for me to take what I learn and make the path easier for those that come after me."

Davis lived his words. He had a life-long love of flying and became the commander of the World War II Tuskegee Airmen and soon after became one of the first African American to receive military aviation wings. He also helped create policies that opened doors for other African Americans in the military.

Davis Barracks was designed and constructed by the U.S. Army Corps of Engineers, New York District's contractor Walsh Construction Company of Chicago, IL and its subcontractor, Clark Nexsen.

The sprawling, six-floor structure contains enough floor space to house five football fields and sits in the Central Area of the main campus which was designated a National Historic Landmark.

When Melville was informed about the building dedication he was invited to the Academy. "A historian showed me around. At one point, I turned around and there were gentlemen wearing hard hats and yellow vests and they said we are from the U.S. Army Corps of Engineers and they wanted to show me the building," said Melville.

"They put a hard hat on me and told me that they wanted me to see, touch and feel the Davis Barracks."

Melville was shown every aspect of the structure from where rock was blasted to make room for the barracks to the interior of the cadet rooms.

Mathew Ludwig, New York District's Military Program Chief at the time, walked Melville around, "He was impressed with the detail and stated on numerous occasions that he was honored to be part of the event and thanked everyone who had a hand in the facility," said Ludwig.

Melville first observed where solid rock was cut for two years to make space for the building. Catherine Scott, New York District's Team leader said, "The barracks stands where there used to be a large rock hill. To make way for the building, we blasted and removed 60 feet of solid rock from the top of the hill. This is enough material to fill a football field 32 inches high."

"We then hauled approximately 150,000 cubic yards of this rock to off-site locations, all done from a restricted project site surrounded by historic structures occupied by over 4000 cadets."

The first floor of the barracks consists of mechanical rooms and space for a chiller plant that will provide air-conditioning to neighboring existing barracks.

Above this floor there is a mezzanine level on the West side where there are cadet storage and trunk rooms.

Above this, floors two through six are dedicated to the dormitories. Each dorm will house two to three cadets who will have access to restrooms and laundry rooms.

An architectural highlight is its central light well. Scott said, "There is a large 17-foot square skylight on the roof and a large open area on each of the floors below; this central "well" space

allows natural sunlight to illuminate the common area."

"This aesthetic design will provide an open feeling for cadets when they gather in the study rooms or collaboration rooms on each floor. A similar skylight is located above each of the two main stairs at each end of the building to provide similar lighting."

Melville said, "The Army Corps showed me each of the barracks, and explained how the heat and air conditioned floors work. It is the first barracks to have air conditioning."

Scott said, "We are using an innovative method to control the climate in the cadet rooms through plastic tubing that was installed in the concrete floor slabs. This tubing will provide radiant heating during the winter months as well as radiant cooling during the summer season. While radiant heating has become more widespread and popular in recent years, using the same tubing to cool the ambient space is a relatively newer technique."

She added, "It works by circulating heated water through tubing in the floor, while during the cooling season the radiant system works very much the same way, except the water is chilled and circulated through the same tubing."

This is one of several ways the building is energy efficient. She said that 30-percent of the building's hot water is being delivered through a solar hot water system that was built on the barrack's roof.

All of this is being done in order that the Army Corps can achieve the U.S. Army's requirement for Leadership in Energy and Environmental Design (LEED) Silver certification.

These energy saving features will save tax payers approximately \$44K annually.

The structure is modern, but you wouldn't know it by looking at the exterior. The building was designed to maintain the look of the rest of the historic 200-year old campus.

Scott said, "The building was designed in the military gothic revival architectural style to blend in with the adjacent historical structures located in the Central Area of the Academy."

The design includes granite surface covering on the exterior walls and gothic arches.

There are also secured entryways that extend the width of the structure and allow a way out to egress from the north formation area to the south side of the building.

In addition, there are parapets, where the roof meets the walls along the roof perimeter that were designed in a defensive battlement style and include concrete crenels, open space, and ca stone lintels and cap stones.

Scott said a significant volume of granite was required for the façade and a pedestal structure below the building –121,000,000 pounds to be exact. This is equivalent to 10,083 elephants, each weighing 12,000 pounds.

Maintaining the historic look of the barracks is important. If a piece of granite breaks off it's fixed. Melville said, "They showed me the computer program they have that tells them what type of piece broke off so that it can be replaced and reset."

Melville is amazed at what was created in his uncle's name. "He has a monument in his name that stands taller than the others, in the center of the campus and is the last barracks to be built in our lifetime and maybe in our children's and grandchildren's lifetime at the U.S. Military Academy, West Point."

Davis Barracks is expected to be opened to the cadets by this spring.

Ludwig said, "It isn't very often that someone will ever get the opportunity to work on such a magnificent project that will help define the future leaders of this great country. The extreme gratitude and excitement that Doug Melville showed to the Army Corps during the tour helped reinforce the importance of this project."

Melville said, "This is a man's life work. It's not just granite, it's not just wiring, it's not just glass and steel, it's actually a real person who lived his entire life putting it on the line and making it out in the end."

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